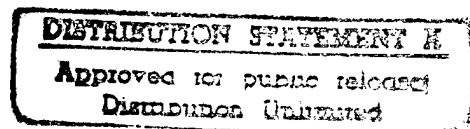


FINAL REPORT
OCTOBER 1996

REPORT NO. 96-73

FUZE, HAND GRENADE (PRACTICE), FUZE MODEL NO. M228, IN WIREBOUND BOX UNITED NATIONS (UN) PERFORMANCE ORIENTED PACKAGING (POP) TESTS



DTIC QUALITY INSPECTED 2

Prepared for:
U.S. Army Armament Research, Development
and Engineering Center
ATTN: AMSTA-AR-ESK
Rock Island, IL 61299-7300

19970616 034



VALIDATION ENGINEERING DIVISION
SAVANNA, ILLINOIS 61074-9639

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					WORK UNIT ACCESSION NO.
11. TITLE (Include Security Classification) Fuze, Hand Grenade (Practice), Fuze Model No. M228, in Wirebound Box, United Nations (UN) Performance Oriented Packaging (POP) Tests					
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17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)		
FIELD	GROUP	SUB-GROUP			
19. ABSTRACT (Continue on reverse if necessary and identify by block number)					
<p>The U.S. Army Defense Ammunition Center (DAC), Validation Engineering Division (SIOAC-DEV), was tasked by U.S. Army Armament Research, Development and Engineering Center (ARDEC) to conduct United Nations (UN) Performance Oriented Packaging (POP) tests on a fuze, hand grenade (practice), fuze model no. M228, in wirebound box, so this item can be shipped IAW UN POP requirements. This report contains the test results.</p>					
20. DISTRIBUTION / AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS			21. ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED		
22a. NAME OF RESPONSIBLE INDIVIDUAL JEROME H. KROHN			22b. TELEPHONE (Include Area Code) 815-273-8929		22c. OFFICE SYMBOL SIOAC-DEV

DEFENSE AMMUNITION CENTER
VALIDATION ENGINEERING DIVISION
SAVANNA, IL 61074-9639

REPORT NO. 96-73

FUZE, HAND GRENADE (PRACTICE), FUZE MODEL NO. M228, IN WIREBOUND BOX,
UNITED NATIONS (UN) PERFORMANCE ORIENTED PACKAGING (POP) TESTS

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PART 1

INTRODUCTION

A. BACKGROUND. The U.S. Army Defense Ammunition Center (DAC), Validation Engineering Division (SIOAC-DEV), was tasked by U.S. Army Armament Research, Development and Engineering Center (ARDEC) to conduct United Nations (UN) Performance Oriented Packaging (POP) tests on a fuze, hand grenade (practice), fuze model no. M228, in wirebound box, for compliance with UN POP requirements.

B. AUTHORITY. This program was conducted IAW mission responsibilities delegated by the U.S. Army Materiel Command (AMC), Logistics Support Activity Packaging, Storage, and Containerization Center (LOGSAPSCC). Effective 9 July 1993, the three letter designator "DEV" was assigned for use when conducting UN POP tests. Effective 9 August 1994 this designation was included in the Joint Regulation AR 700-143, Performance Oriented Packaging of Hazardous Materials.

C. OBJECTIVE. To determine if this item meets UN POP requirements.

D. CONCLUSION. As tested, the fuze, hand grenade (practice), fuze model no. M228, in wirebound box, met all UN POP requirements with no problems encountered during testing.

PART 2
OCTOBER 1996

ATTENDEES

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815-273-8090

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Director
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PART 3

TEST PROCEDURES

The test procedures outlined herein were extracted and summarized from the Bureau of Explosives (BOE) Tariff No. BOE-6000-L, Subpart M, Section 178.600. All tests were conducted to Packing Group II requirements.

A. **Drop Test.** Each package will be dropped onto a nonyielding surface from the height and orientations listed below. The drop height is measured as the vertical distance from the target to the lowest point on the package. The drop height for Packing Group I is 1.8 meters (5.9 feet), for Packing Group II it is 1.2 meters (3.9 feet), and Packing Group III is 0.8 meters (2.6 feet).

Packaging	No. of tests	Drop orientation of samples
Steel drums, Aluminum drums, Metal drums (other than steel or aluminum), Steel jerricans, Plywood drums, Wooden barrels, Fiber drums, Plastic drums and jerricans, Composite packagings which are in the shape of a drum.	Six — (three for each drop) . . .	First drop (using three samples): The package must strike the target diagonally on the chime or, if the packaging has no chime, on the circumferential seam or an edge. Second drop (using the other three samples): The package must strike the target on the weakest part not tested by the first drop, for example a closure or, for some cylindrical drums, the welded longitudinal seam of the drum body.
Boxes of natural wood, Plywood boxes, Reconstituted wood boxes, Fiberboard boxes, Plastic boxes, Steel or aluminum boxes, Composite packagings which are in the shape of a box.	Five — (one for each drop) . . .	First drop: Flat on the bottom (using the first sample). Second drop: Flat on the top (using the second sample). Third drop: Flat on the long side (using the third sample). Fourth drop: Flat on the short side (using the fourth sample). Fifth drop: On a corner (using the fifth sample).
Bags — single-ply with a side seam.	Three — (three drops per bag) .	First drop: Flat on a wide face (using all three samples). Second drop: Flat on a narrow face (using all three samples). Third drop: On an end of the bag (using all three samples).
Bags — single-ply without a side seam, or multi-ply	Three — (three drops per bag) .	First drop: Flat on a wide face (using all three samples). Second drop: On an end of the bag (using all three samples).

B. **Stacking Test.** The test sample must be subjected to a force applied to the top surface of the test sample equivalent to the total weight of identical packages which might be stacked on it during transport. The minimum height of the stack, including the test sample, must be 3.0 meters (10 feet). The duration of the test must be 24 hours, except that plastic drums, jerricans, and composite packaging 6HH, intended for liquids, shall be subjected to the stacking test for a period of 28 days at a temperature of not less than 40 degrees Celsius (104 degrees Fahrenheit). Alternative test methods which yield equivalent results may be used if approved by the Associate Administrator for Hazardous Materials Safety.

C. **Vibration Test.** Three sample packagings, selected at random, must be filled and closed as for shipment. The three samples must be placed on a vibrating platform that has a vertical or

rotary double-amplitude (peak-to-peak displacement) of one inch. The packages should be constrained horizontally to prevent them from falling off the platform, but must be left free to move vertically, bounce and rotate. The test must be performed for one hour at a frequency that causes the package to be raised from the vibrating platform to such a degree that a piece of material approximately 1.6 mm (0.063 inch) thickness (such as steel strapping or paperboard) can be passed between the bottom of any package and the platform.

D. Pass/Fail Criteria. A package passes the above tests if there is no rupture or leakage from any of the samples. No test sample should show any deformation which could adversely affect transportation safety or any distortion liable to reduce packaging strength.

PART 4

UN POP TESTS

Fuze, Hand Grenade (Practice), Fuze Model No. M228, in wirebound box,
United Nations (UN) Performance Oriented Packaging (POP) Tests

U.S. Army Defense Ammunition Center
SIOAC-DEV, 3700 Army Depot Road, Savanna, IL 61074-9639
815-273-8908
Jerome H. Krohn

Test Report Number: 96-73	Service Code: DEV
Product NSN: 1330-00-168-5502	Nomenclature: Fuze, Hand Grenade (Practice), Fuze Model No. M228, in wirebound box
Shipping Name: Fuze, Detonating	UN ID Number: 0257
Hazard Class: 1.4B	Packing Group: II
Physical State: Solid	NALC/DODAC: None
CAA Number: None	EX Number: None
CFR 49 Packaging Method: E-137	
Net Explosive Weight: .0045 kgs (.0099 lbs)	

DESCRIPTION OF PACKAGINGS TO BE TESTED

EXTERIOR CONTAINER

Exterior Container: Natural Wood Wirebound Box
CFR 49 Reference Number: 173.62
UN Code: 4C1
NSN Exterior Container: N/A
Specifications: 4C1
Drawing Number: N/A

Net Quantity Weight: 36 kg (80 lbs)
Tested Gross Weight: 50 kg (110 lbs)
Dimensions Interior: L-26-1/2" X W-18" X H-13-3/4"
Manufacturer: Unknown
Year Container Manufactured: 1995
Drawing Number(s): 9251665-4 REV E
Cushioning: Cardboard liner
Closure: 4 wire fasteners

INTERMEDIATE CONTAINER

Intermediate Container Description: Fiberboard boxes
Specification Number: N/A
Container NSN: N/A
Intermediate Container Cushioning: Styrofoam insert
Intermediate Container Closure Method: Tape
Intermediate Container Dimensions: L-16-1/4" X W-11-5/8" X H-2-7/8"
Number Of Intermediate Containers: 8

UNIT CONTAINER

Unit Container Description: None
Unit Container Specification: N/A
Unit Container NSN: N/A
Unit Container Cushioning: None
Unit Container Closure Method: N/A
Unit Container Dimensions: N/A
Number of Unit Containers: N/A

SPECIAL NOTES

All exterior, intermediate, and unit containers must be inspected prior to use. Inspect for physical damage and structural integrity of the containers.

SUPPLEMENTAL INFORMATION

Permitted Transportation Modes: Military or DOD licensed truck and rail,
Military or DOD licensed ship,
Military or DOD licensed aircraft.

Specific Gravity: N/A

Hydrostatic Test Pressure Applied: N/A

Leakproofness Test Pressure Applied: N/A

TEST PROCEDURES

<u>Tests Conducted</u>	<u>Test Method</u>	<u>Test Results</u>
(1) Pre-Conditioning (fiberboard)	Part 178.602	N/A
(2) Drop Test	Part 178.603(e)(1)(ii)	Pass
(3) Leakproofness Test	Part 178.604	N/A
(4) Hydrostatic Pressure Test	Part 178.605	N/A
(5) Stacking Test (1,500 lbs)	Part 178.606(c)(1)	Pass
(6) Vibration Test	Part 178.608(b)(3)	Pass


UN POP Marking

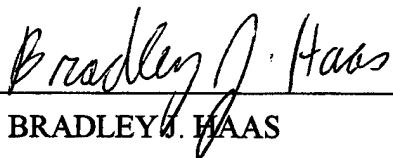
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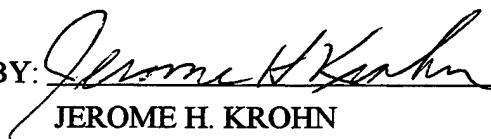
n USA/DOD/DEV

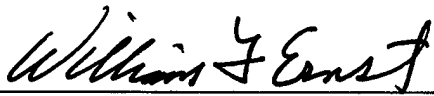
CERTIFICATION

Unless expressly stated to the contrary, we certify that all of the above applicable tests have been performed in strict conformance to CFR 49, Subpart M, Parts 178.600 - 178.608. Based on the successful test results shown above, this container is deemed suitable for transport of the hazardous material described herein, provided that maximum tested weights and quantities are not exceeded and the packaging is assembled as tested. The use of other packaging methods or components may make this test invalid.

PREPARED BY:  DATE: 19 Mar 97
WILLIAM R. MEYER
Test Engineer

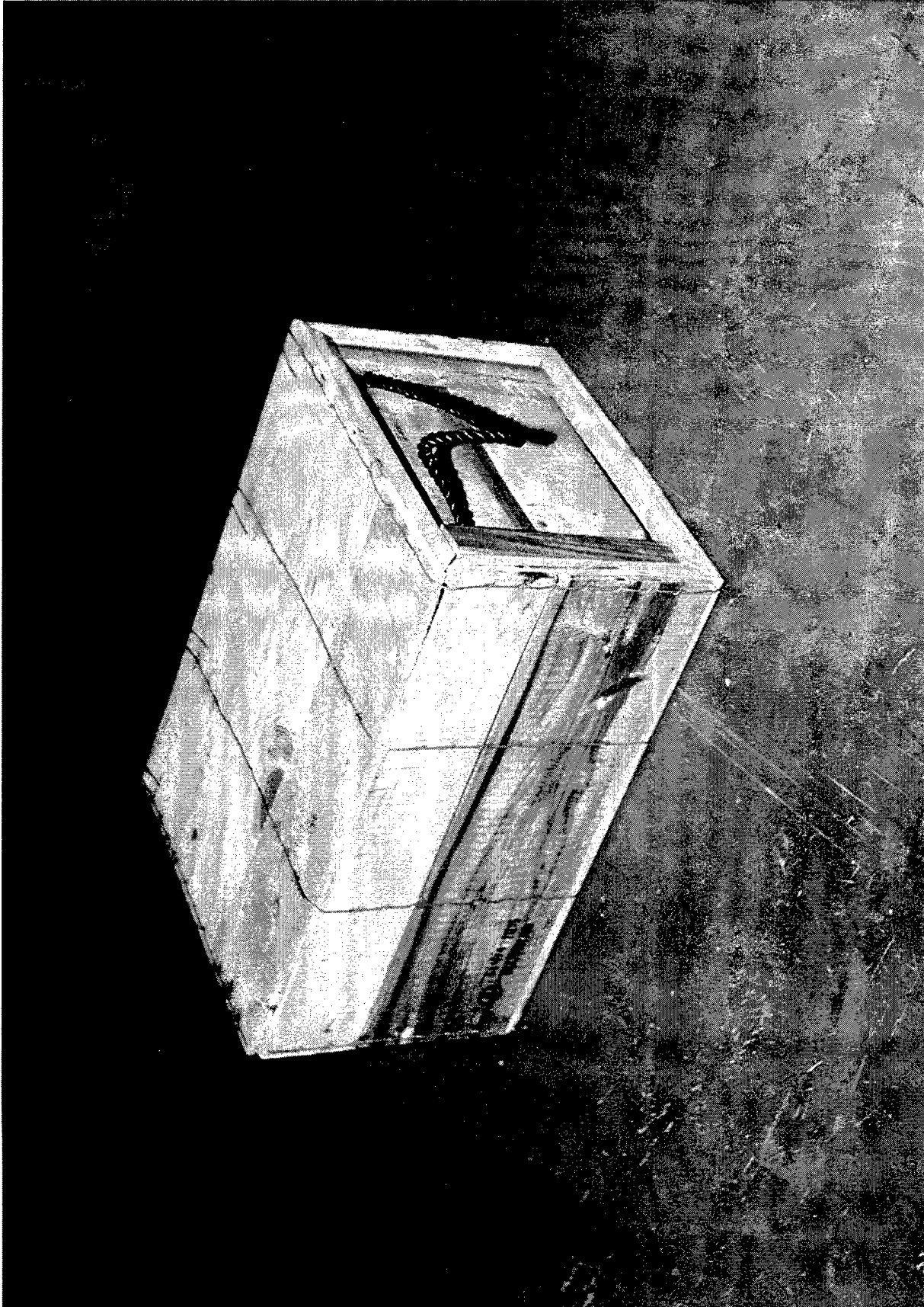
PREPARED BY:  DATE: 19 March 97
BRADLEY J. HAAS
Test Engineer

SUBMITTED BY:  DATE: 19 March 97
JEROME H. KROHN
Chief, Validation Engineering Division

APPROVED BY:  DATE: 19 March 97
WILLIAM F. ERNST
Chief, Logistics Engineering Office

PART 5

PHOTOGRAPH



	U.S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL - SAVANNA, IL	
DAC-DEV-96-73-01. This photo shows the item tested that passed UN POP requirements.		

PART 6

APPENDIX

KEY 001685502

NIIN 001685502

LAC04PL2102

PICA	UI	SL	PMIC	ADPE	PSP	AAC	PC	RELSN/TD/QE	PRC	UPRIC
DATA	EA		A	O	4	C			S	1.70

	OA	FSC	SOS	MGMT-CTL	EFF-DT
PICA	BF	1330	B14	DK1XNX	92306
SICA	JG	1330	NCB	K2T BV	92214
	PM	1330	MHQ	OT13X	92214
	SU	1330	PG5	N H N	92001

DIDS	FSC	EFF-DT	M-RN	PICA	P-LA	SOS	SICA	S-LA	MATCAT	RELSN/TD/QE	DSOR
DATA	1330	92275	A901	BF	22	B14				D	
	1330	92275	F2BF	BF	22	B14	SU	8D			
	1330	92275	MA5W	BF	22	B14	PM	8D			
	1330	92275	NGFF	BF	22	B14	JG	8D			

NIMSC DLT-RSN DMIL MDR1 MDR2 MDR3 MDR4 MDR5 MDR6 MDR7 MDR8 MDR9 MDR10

J	G	BF	**	BF						
7	G	BF	TU	**	BF	TU				
7	G	BF	PM	JG	PA	**	BF	PM	JG	PA
7	G	BF	JG	**	BF	JG	KF			

PF1=MENU

PF6=NEXT DISPLAY

PF7=NEXT KEY

HELP

KEY 001685502

NIIN 001685502

LAC03PL2102

DODIC DATA	DODAC 1330G878	DODIC G878	NALC	LARC	DT-EFF-LOG-ACTN 92306		

REFERENCE	REF-NBR-FMT-CD	RNCC	RNVC	DAC	RNAAC	REF-NBR-STAT-CD	JCD
DATA		3	1	1	BF		
		6	9	9	BF		

FSCM	REFERENCE NUMBER
19200	9235210
99999	1330-G878

SVC-AGCY-DESI-CD

PF1=MENU

PF6=NEXT DISPLAY

PF7=NEXT KEY

HELP | |

NOTE:
10 pages,
Pass to Bill Myer
PH 585-8096
mark Rapp

02

LAC06PI

KEY 001685502

ARGO SHC ADC ASHC HMC DT-1

PICA UI SL PMIC ADPE PSP AP
DATA EA A 0 4 C

F 4 A 34 DK 923

OA FSC SOS MGMP
PICA BF 1330 B14 DK
SICA JG 1330 NCB K2T
PM 1330 MHQ OT
SU 1330 FG5 N

DT-1

923

DOT-LBL DOT-MRKG CG-CL LS

DIDS FSC EFF-DT M-RN PICA P-L
DATA 1330 92275 A901 BF 22
1330 92275 F2BF BF 22
1330 92275 MA5W BF 22
1330 92275 NGFF BF 22

F DK III

WTRF-SHPBD

DEXPREG

004500

NIMSC DLT-RSN DMIL MDR1 MD
J G BF
7 G BF
7 G BF
7 G BF

HELP |

PF1=MENU

PF6=NEXT DISPLAY

PF

KEY 001685502

ITEM INCD ITMNM
IDENT 20085 FUZE, HAND GRENADE
DATA MDI.-NRR

SEQ

ITEM D

01 ITEM NAME: FUZE, HAND
02 FUZE TYPE: PRACTICE.
03 FUZE DELAY TIME: 4.00
04 ONCE MAXIMUM

/I,FSN2102,001685502

PAGE 0017 OF 0024 96249#115331-00248 CMD-DSG: M

21 -M117

**** RECORD NUMBER *** 081 ****

SECT-ID = 0021 SEG-CD = 0002
LNG-DESC = 242.00 INCHES ARMY PALLET#
SUPPL-LINE-SEQ = A

RELCD = +2
LNG-DESC-LINSEQ = 02

**** RECORD NUMBER *** 082 ****

SECT-ID = 0021 SEG-CD = 0002
LNG-DESC = PKNH1111 PACKAGE NOMINAL OVERALL HEIGHT
SUPPL-LINE-SEQ = B

RELCD = +2
LNG-DESC-LINSEQ = 02

**** RECORD NUMBER *** 083 ****

SECT-ID = 0021 SEG-CD = 0002
LNG-DESC = 3@14.00 INCHES SHIPPING CONTAINER#
SUPPL-LINE-SEQ = C

RELCD = +2
LNG-DESC-LINSEQ = 02

**** RECORD NUMBER *** 084 ****

SECT-ID = 0021 SEG-CD = 0002
LNG-DESC = 241.00 INCHES ARMY PALLET#
SUPPL-LINE-SEQ = D

RELCD = +2
LNG-DESC-LINSEQ = 02

**** RECORD NUMBER *** 085 ****

SECT-ID = 0021 SEG-CD = 0002
LNG-DESC = GRWT1111 GROSS WEIGHT@90.0 SHIPPING CON
SUPPL-LINE-SEQ = E

RELCD = +2
LNG-DESC-LINSEQ = 02

/

/I,FSN2102,001685502

PAGE 0023 OF 0024 96249#115331-00248 CMD-DSG: M

21 -M117

**** RECORD NUMBER *** 111 ****

SECT-ID = 0021 SEG-CD = 0002

LNG-DESC = SR-51THE MANUFACTURERS DATA#

SUPPL-LINE-SEQ = E

RELCD = +2

LNG-DESC-LINSEQ = 03

**** RECORD NUMBER *** 112 ****

SECT-ID = 0021 SEG-CD = 0002

LNG-DESC = 1MANUFACTURERS CODE@19200#

SUPPL-LINE-SEQ = F

RELCD = +2

LNG-DESC-LINSEQ = 03

**** RECORD NUMBER *** 113 ****

SECT-ID = 0021 SEG-CD = 0002

LNG-DESC = 1DESIGN CONTROL REFERENCE@9235210#

SUPPL-LINE-SEQ = G

RELCD = +2

LNG-DESC-LINSEQ = 03

**** RECORD NUMBER *** 114 ****

SECT-ID = 0021 SEG-CD = 0002

LNG-DESC = FZ HND GREN PRAC ASSD W/CLIP M228 360

SUPPL-LINE-SEQ = B

RELCD = +2

LNG-DESC-LINSEQ = 49

**** RECORD NUMBER *** 115 ****

SECT-ID = 0021 SEG-CD = 0002

LNG-DESC = PLT DWG 19-48-4116/71

SUPPL-LINE-SEQ = K

RELCD = +2

LNG-DESC-LINSEQ = 49

/

/I,FSN2102,001685502

PAGE 0024 OF 0024 96249#115331-00248 CMD-DSG: M

21 -M117

**** RECORD NUMBER *** 116 ***

SECT-ID = 0021

SEG-CD = 0002

RELCD = +2

LNG-DESC = CTNR 026.38X18.13X14.13 12/P 00004320/P

LNG-DESC-LINSEQ = 49

SUPPL-LINE-SEQ = L

**** RECORD NUMBER *** 117 ***

SECT-ID = 0021

SEG-CD = 0002

RELCD = +2

LNG-DESC = PLT 052.75X42.38X41.75 WT 1166 CU 54.0

LNG-DESC-LINSEQ = 49

SUPPL-LINE-SEQ = M

/I,FSN2102,001685502

PAGE 0011 OF 0024 96249#115331-00248 CMD-DSG: M

21 -M117

**** RECORD NUMBER *** 051 ***

SECT-ID = 0021 SEG-CD = 0002

RELCD = +1

LNG-DESC = SR-51THE MANUFACTURERS DATA#

LNG-DESC-LINSEQ = 02

SUPPL-LINE-SEQ = Y

**** RECORD NUMBER *** 052 ***

SECT-ID = 0021 SEG-CD = 0002

RELCD = +1

LNG-DESC = 1MANUFACTURERS CODE@19200#

LNG-DESC-LINSEQ = 02

SUPPL-LINE-SEQ = Z

**** RECORD NUMBER *** 053 ***

SECT-ID = 0021 SEG-CD = 0002

RELCD = +1

LNG-DESC = 1DESIGN CONTROL REFERENCE@9235210#

LNG-DESC-LINSEQ = 03

SUPPL-LINE-SEQ = A

**** RECORD NUMBER *** 054 ***

SECT-ID = 0021 SEG-CD = 0002

RELCD = +1

LNG-DESC = FZ HND GREN PRAC UNASSD W/CLIP M228 200

LNG-DESC-LINSEQ = 49

SUPPL-LINE-SEQ = B

**** RECORD NUMBER *** 055 ***

SECT-ID = 0021 SEG-CD = 0002

RELCD = +2

LNG-DESC = NAME1ITEM NAME@FUZE,HAND GRENADE#

LNG-DESC-LINSEQ = 01

SUPPL-LINE-SEQ = A

/

KEY 001685502

NIIN 001685502

LAC04PL2102

PICA	UI	SL	PMIC	ADPE	PSP	AAC	PC	RELSN/TD/QE	PRC	UPRIC
DATA	EA		A	0	4	C			S	1.70

	OA	FSC	SOS	MGMT-CTL	EFF-DT
PICA	BF	1330	B14	DK1XNX	92306
SICA	JG	1330	NCB	K2T BV	92214
	PM	1330	MHQ	OT13X	92214
	SU	1330	FG5	N H N	92001

DIDS	FSC	EFF-DT	M-RN	PICA	P-LA	SOS	SICA	S-LA	MATCAT	RELSN/TD/QE	DSOR
DATA	1330	92275	A901	BF	22	B14				D	
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	1330	92275	MA5W	BF	22	B14	PM		8D		
	1330	92275	NGFF	BF	22	B14	JG		8D		

NIMSC	DLT-RSN	DMIL	MDR1	MDR2	MDR3	MDR4	MDR5	MDR6	MDR7	MDR8	MDR9	MDR10
-------	---------	------	------	------	------	------	------	------	------	------	------	-------

J		G	BF	**	BF							
7		G	BF	TU	**	BF	TU					
7		G	BF	PM	JG	PA	**	BF	PM	JG	PA	
7		G	BF	JG	**	BF	JG	KF				

PF1=MENU

PF6=NEXT DISPLAY

PF7=NEXT KEY

HELP |

KEY 001685502

NIIN 001685502

LAC05PL2102

ITEM	INCD	ITNM	RPD	TYP	MRC	IMC	IMCA	DTASG	FMR-	MOE	HMIC	ESDC
IDENT	20085	FUZE,HAND GRENADE		L				70114				
DATA		MDI.-NRR										

SEQ	ITEM DESCRIPTION
01	ITEM NAME: FUZE,HAND GRENADE.
02	FUZE TYPE: PRACTICE.
03	FUZE DELAY TIME: 4.00 SECONDS MINIMUM AND.5.00 SEC
04	ONDS MAXIMUM.

X

7

04 ONDS MAXIMUM.
05 FUZE MODEL NUMBER: M228.
06 DOD AMMUNITION CODE: 1330-G878.
07 UNIT PACKAGE QUANTITY: 45 AND.8 AND.1.
08 UNIT PACKAGE TYPE: CARTON, FIBERBOARD AND.BAG, BAR
09 RIER, MOISTURE-VAPORPROOF AND.BOX, WOOD.
10 SPECIAL FEATURES: ASSEMBLED W/SAFETY CLIP.
11 REFERENCE NUMBER DIFFERENTIATING CHARACTERISTICS:
12 AS DIFFERENTIATED BY UNIT PACKAGE QUANTITY, SPECIA
13 L FEATURES.
99 END OF DATA

PF1=MENU PF4=NEXT PAGE PF6=NEXT DISPLAY PF7=NEXT KEY HELP | | PAGE 1

KEY 001685502

NIIN 001685502

LAC07PL2102

PALLET	SVC	QTY-PER-PLLT	PLLT-WT (LB)	PLLT-LGTH (IN)	PLLT-WDTH (IN)	PLLT-HGT (IN)
DATA		4320	666.0	52.25	42.00	41.00

SVC	SC-PER-PLLT	PLLT-CUBE (FT)	PRO-WT (LB)	PRO-CUBE (FT)
	12	52.068	0.000	0.000

PF1=MENU PF6=NEXT DISPLAY PF7=NEXT KEY

HELP | |

KEY 001685502

NIIN 001685502

LAC08PL2102

PACKAGING SVC PKG-REF-1 PKG-REF-2 PKG-REF-3
DATA

SHTP QTY-PER-CNTR SC-WT SC-LGTH SC-WID SC-HGT
CONTAINER (LB) (IN) (IN) (IN)
DATA
360 90.0 26.18 17.75 14.00
SC-DIAM SC-CUBE SC-PRO-WT SC-PRO-CUBE
(IN) (FT) (LB) (FT)
0.00 3.8 0.250 0.011

PF1=MENU

PF6=NEXT DISPLAY

PF7=NEXT KEY

HELP | |

KEY 001685502

NIIN 001685502

LAC05PL2102

ITEM	INCD	ITMNM	RPD	FMR-		
IDENT	20085	FUZE,HAND GRENADE	TYP MRC IMC IMCA DTASG	MOE	HMIC	ESDC
DATA		MDL-NBR	L	70114		

SEQ	ITEM DESCRIPTION
01	ITEM NAME: FUZE,HAND GRENADE.
02	FUZE TYPE: PRACTICE.
03	FUZE DELAY TIME: 4.00 SECONDS MINIMUM AND.5.00 SEC
04	ONDS MAXIMUM.
05	FUZE MODEL NUMBER: M228.
06	DOD AMMUNITION CODE: 1330-G878.
07	UNIT PACKAGE QUANTITY: 45 AND.8 AND.1.
08	UNIT PACKAGE TYPE: CARTON, FIBERBOARD AND.BAG, BAR
09	RIER, MOISTURE-VAPORPROOF AND.BOX, WOOD.
10	SPECIAL FEATURES: ASSEMBLED W/SAFETY CLIP.
11	REFERENCE NUMBER DIFFERENTIATING CHARACTERISTICS:
12	AS DIFFERENTIATED BY UNIT PACKAGE QUANTITY, SPECIA
13	L FEATURES.
99	END OF DATA

PF1=MENU PF4=NEXT PAGE PF6=NEXT DISPLAY PF7=NEXT KEY HELP | | PAGE 1

KEY 001685502

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FREIGHT INTG NMFC SUB UFC-CD LTL LCL RVI WAT CARGO SHC ADC ASHC HMC DT-TRAN1
DATA

064300 B 05990 M J 1 411 F 4 A 34 DK 92306

NMFC-DESC

DT-TRAN2

EXPLOSIVES NOI/AMMO/FIREWORKS SUB2

92306

HAZARD IBD CL-DIV GP-CD CHEM FF-GP UNO DOT-CL DOT-LBL DOT-MRKG CG-CL LS
DATA

1.4 B I 0257 F F DK III

DOT-EXEMP NEW-TRANS NEW-STRG NEW-WTRF-SHPBD DEXPREG

0.004500 0.004500 0.004500

PF1=MENU PF6=NEXT DISPLAY PF7=NEXT KEY HELP | |